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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/045,675

11/09/2001

Yugo Watanabe

9683/96

2435

7590

10/05/2004

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P.O. Box 10395

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EXAMINER

LY, NGHI H

ART UNIT

PAPER NUMBER

2686

6

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/045,675

Applicant(s)

WATANABE, YUGO

Examiner

Nghi H. Ly

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All \* b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ \* Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson et al (US 5,970,408) in view of Kojima (US 6,272,344).

Regarding claims 1, 7, 9, 11, 13 and 14-17, Carlsson teaches a mobile communication network (see fig.1) comprising: a plurality of base stations each of which forms a base station area (see fig.1, base stations 12 and 14), a presence area storage unit for storing a presence area information indicating a presence area of a portable communication terminal (see fig.9, VLR 12 and see column 16, lines 20-25), changes the presence area information of the portable communication terminal stored in the presence area storage unit based on the specified presence area information (column 16, lines 20-25, see "location update"), retrieves the presence area information of the portable communication terminal from the presence area storage unit when an incoming call request to the portable communication terminal is received (see column 16, line 65 to column 17, line 9), and transmits the incoming call request to the base station in the presence area indicated by the retrieved presence area information (see column 16, line 65 to column 17, line 9).

Carlsson does not specifically disclose a traveling schedule storage unit for

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storing a scheduled path information indicating one or more base station areas through which a moving object accompanied by one or more said portable communication terminals passes, and a scheduled time information indicating a scheduled time of the movement of the moving object, and a control station which, when the portable communication terminal is moving with the moving object specifies a present area information indicating a base station area within which the moving object is predicted to be located based on the current time, the scheduled path information, and the scheduled time information stored in the traveling schedule storage unit.

Kojima teaches a traveling schedule storage unit for storing a scheduled path information indicating one or more base station areas through which a moving object accompanied by one or more said portable communication terminals passes (see fig. 1 and see column 7, lines 41-53), and a scheduled time information indicating a scheduled time of the movement of the moving object (see column 7, lines 41-53), and a control station which, when the portable communication terminal is moving with the moving object (see Abstract and see fig. 2, the portable communication terminals 27-29 is moving with the moving object 9) specifies a present area information indicating a base station area within which the moving object is predicted to be located based on the current time, the scheduled path information, and the scheduled time information stored in the traveling schedule storage unit (see column 8, lines 26-36),

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Kojima into the system of Carlsson in order to provide a position registration method for a mobile communications

system which can achieve reduction of the number of times of position registration of a mobile station (see Kojima, column 1, lines 63-66).

Regarding claims 2 and 8, Carlsson teaches a mobile communication network (see fig.1).

Carlsson does not specifically disclose the control unit receives, from a moving object communication apparatus installed in the moving object, an identification information of a portable communication terminal moving with the moving object, and specifies the portable communication terminal moving with the moving object based on the identification information.

Kojima further teaches the control unit receives, from a moving object communication apparatus installed in the moving object, an identification information of a portable communication terminal moving with the moving object, and specifies the portable communication terminal moving with the moving object based on the identification information (see column 2, lines 23-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Kojima into the system of Carlsson in order to perform a position registration operation into the switching control station.

Regarding claims 4 and 10, Carlsson teaches the pass area is a base station area each formed by a base station (see fig.3, cells 12a, 12c and 14a).

Regarding claim 5, the combination of Carlsson and Kojima further teaches the traveling schedule storage unit stores an auxiliary path information indicating a more

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extensive area than the pass area indicated by the scheduled path information (see Kojima, column 7, lines 47-53), and wherein, when the moving object is not moving on schedule (see Kojima, column 8, lines 26-36), the control unit changes the presence area information on the portable communication terminal moving with the moving object to a presence area information according to the location of the moving object based on the auxiliary path information and the scheduled time information (Kojima, column 7, lines 47-53, see "each time it moves and performs position registration, the service area number of the data 54 is rewritten").

Regarding claims 6, 12 and 18, the combination of Carlsson and Kojima further teaches the control unit recognizes that the moving object does not move on schedule by receiving, from a base station forming a base station area through which the moving object passes, a notice of abnormal running that indicates that the moving object does not pass the base station area on the schedule indicated on the scheduled time information (Kojima, column 7, lines 47-53, see "each time it moves and performs position registration, the service area number of the data 54 is rewritten", since movement of an object based on time schedule, the teaching of Kojima inherently teaches the moving object does not move on schedule, a notice of abnormal running that indicates that the moving object does not pass the base station area).

Regarding claim 19, Carlsson teaches a mobile communication network (see fig.1).

Carlsson does not specifically disclose the control unit receives the base station control unit compares the time at which a notice of the location is received from a

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moving object communication unit installed on the moving object with the time indicated by the presence scheduled time information, and determines, based on the result of comparison, whether or not the moving object moves on schedule.

Kojima teaches the control unit receives the base station control unit compares the time at which a notice of the location is received from a moving object communication unit installed on the moving object with the time indicated by the presence scheduled time information (see column 8, lines 26-36), and determines, based on the result of comparison, whether or not the moving object moves on schedule (fig.6, see "leaving" and "y") and column 7, lines 47-53, see "each time it moves and performs position registration, the service area number of the data 54 is rewritten").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Kojima into the system of Carlsson so that schedule can be accurately maintained.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Alvesalo (US 5,384,824) teaches method and carry out a location updating from a mobile cellular radiophnoe system to another cellular radiophone system.

b. Ezuriko (US 6,591,096) teaches automatic radio wave output limiting system for portable telephone set.

c. Kennedy (US 5,539,810) teaches data messaging in a communication network.

d. Hamada (US 6,646,569) teaches navigation apparatus using radio communication device.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (703) 605-5164. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

*NHL*  
09/28/04

*Marsha D. Banks-Harold*

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